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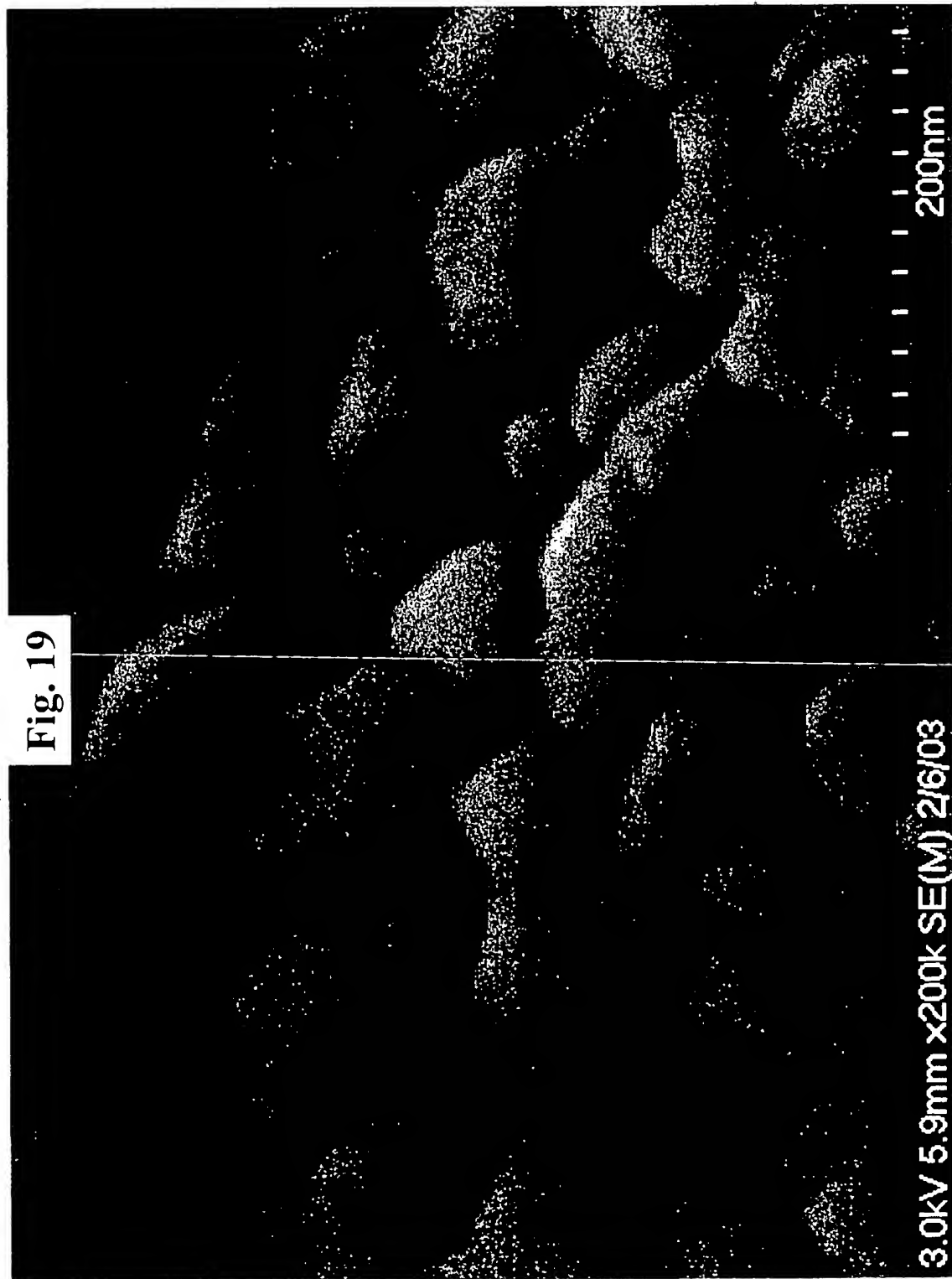
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Fig. 19



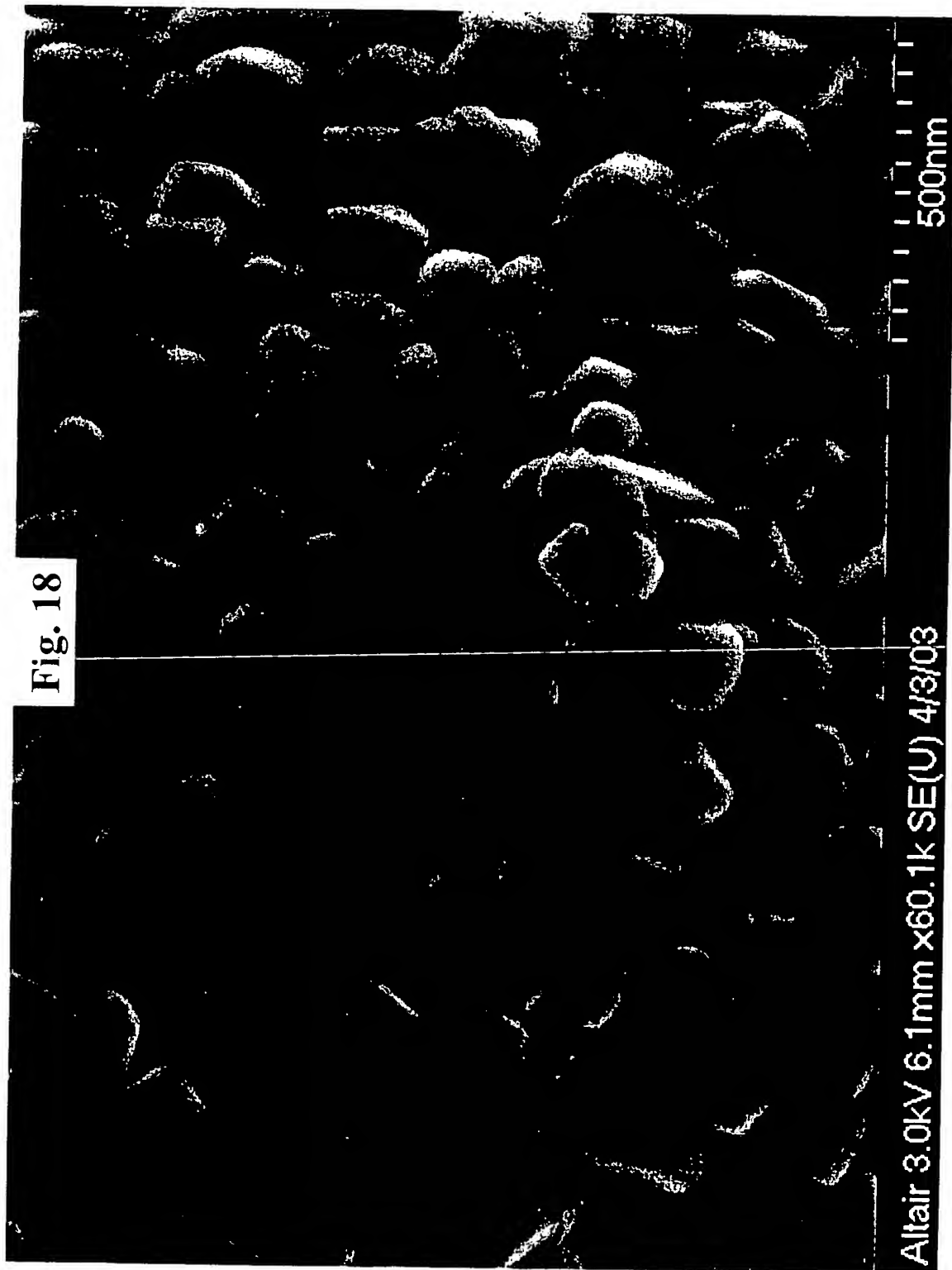
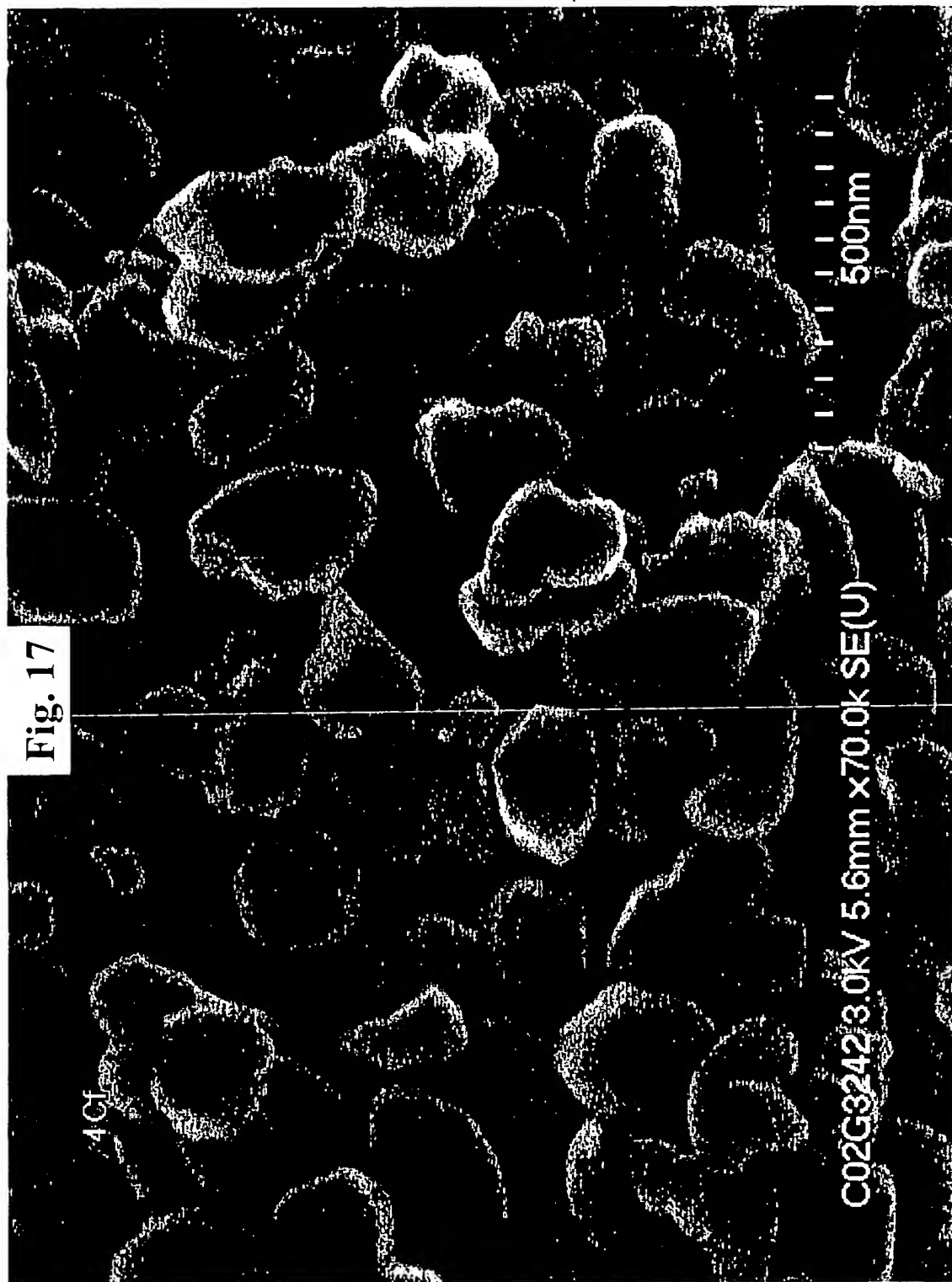


Fig. 18

Altair 3.0kV 6.1mm x60.1k SE(U) 4/3/03



**Fig. 16**  
L85DCW Milling Profile Monitored by the Coulter Particle  
Size Analyzer LS230.

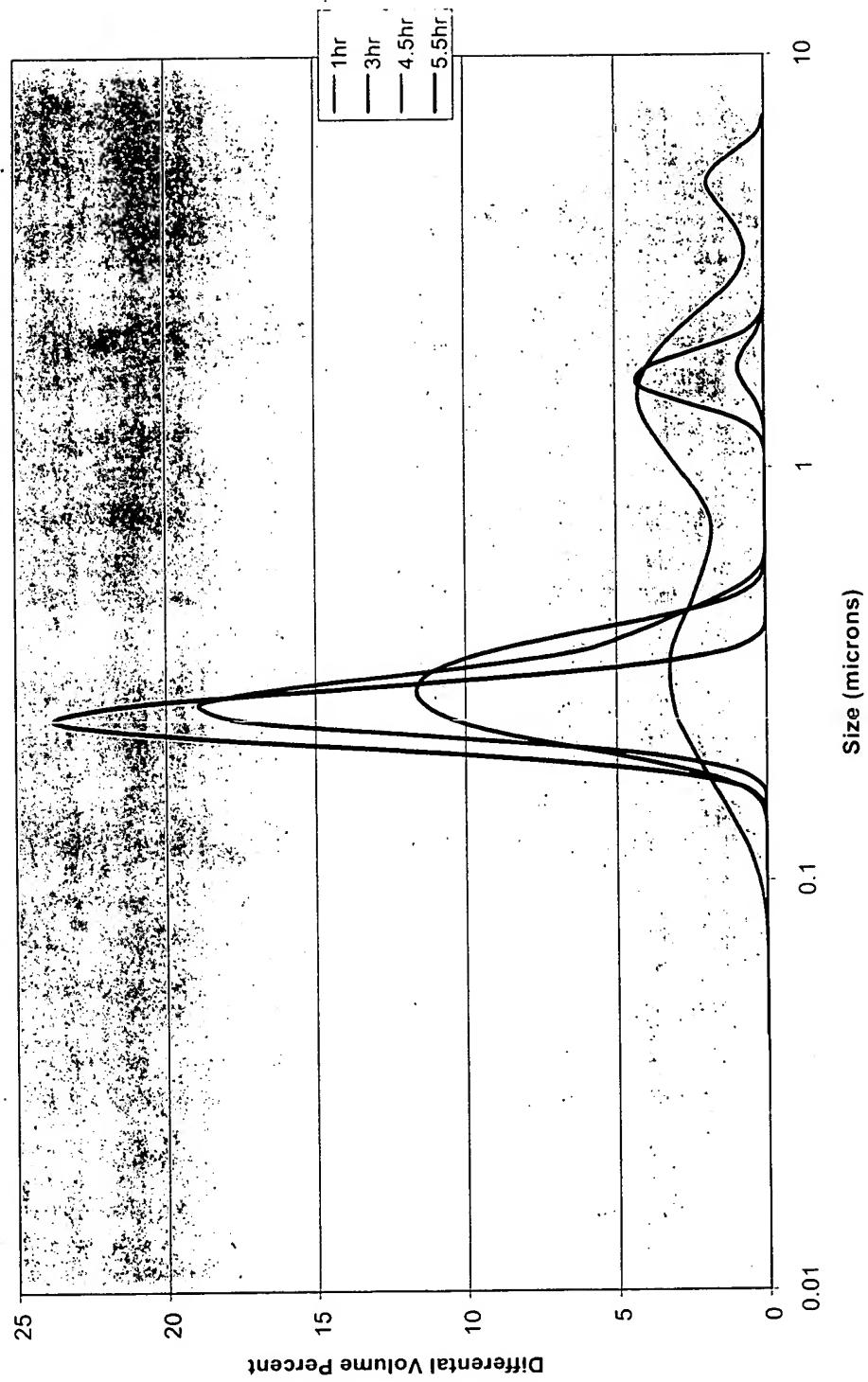


Fig. 15

XRD scan of the washed pigment base, calcined at 550°C.  
Card 21-1276 matches-phase pure rutile.

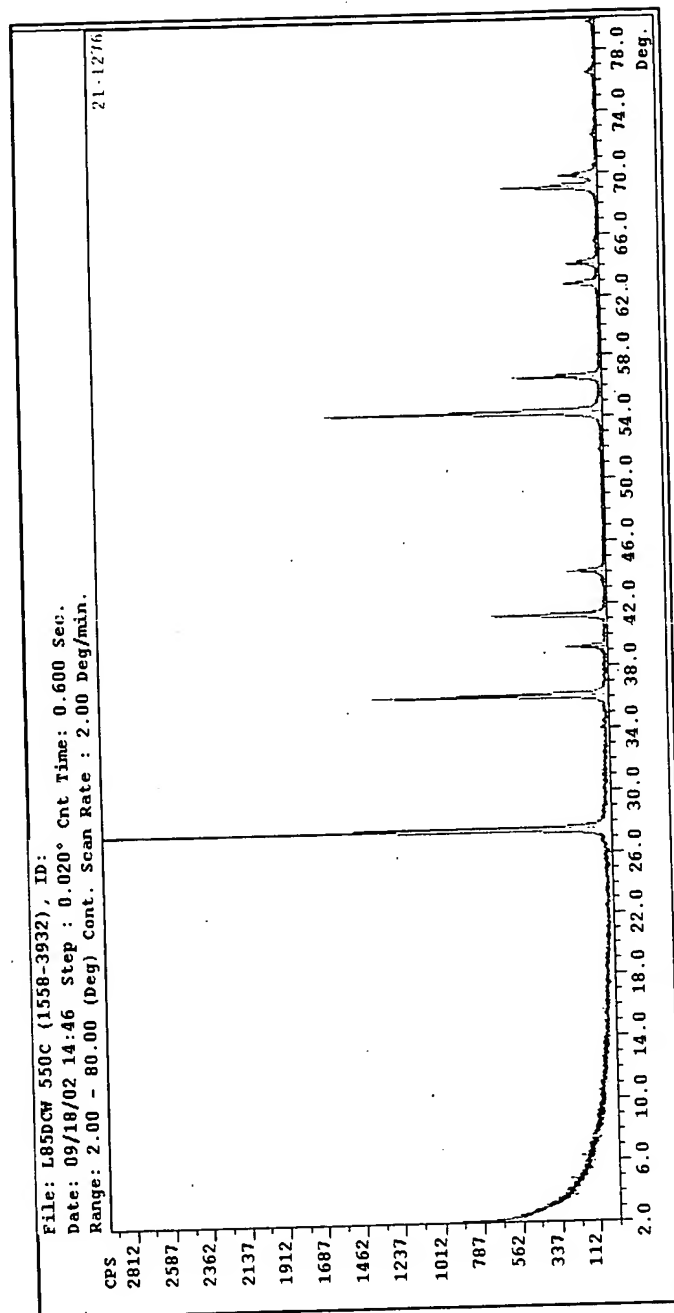
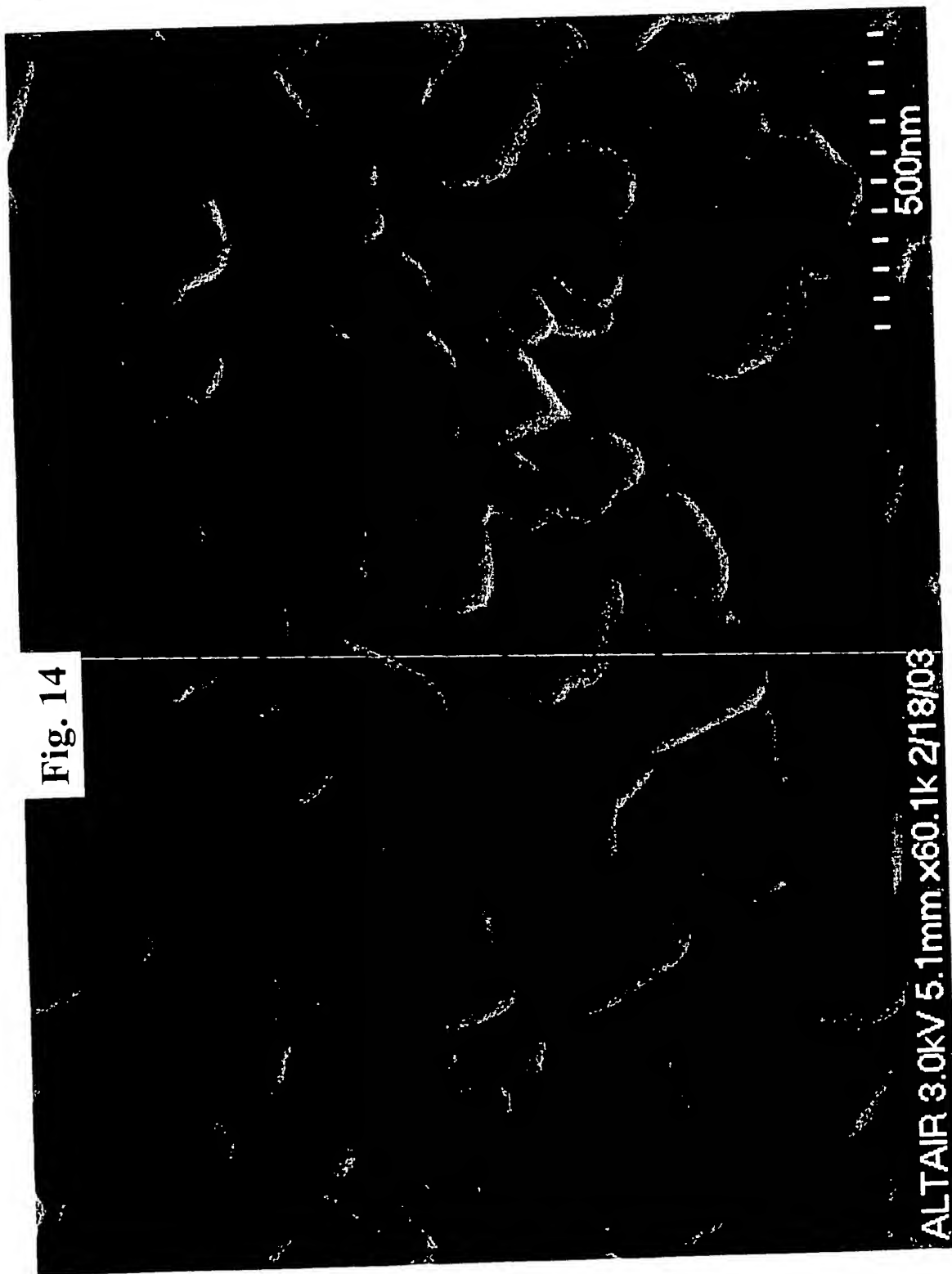


Fig. 14



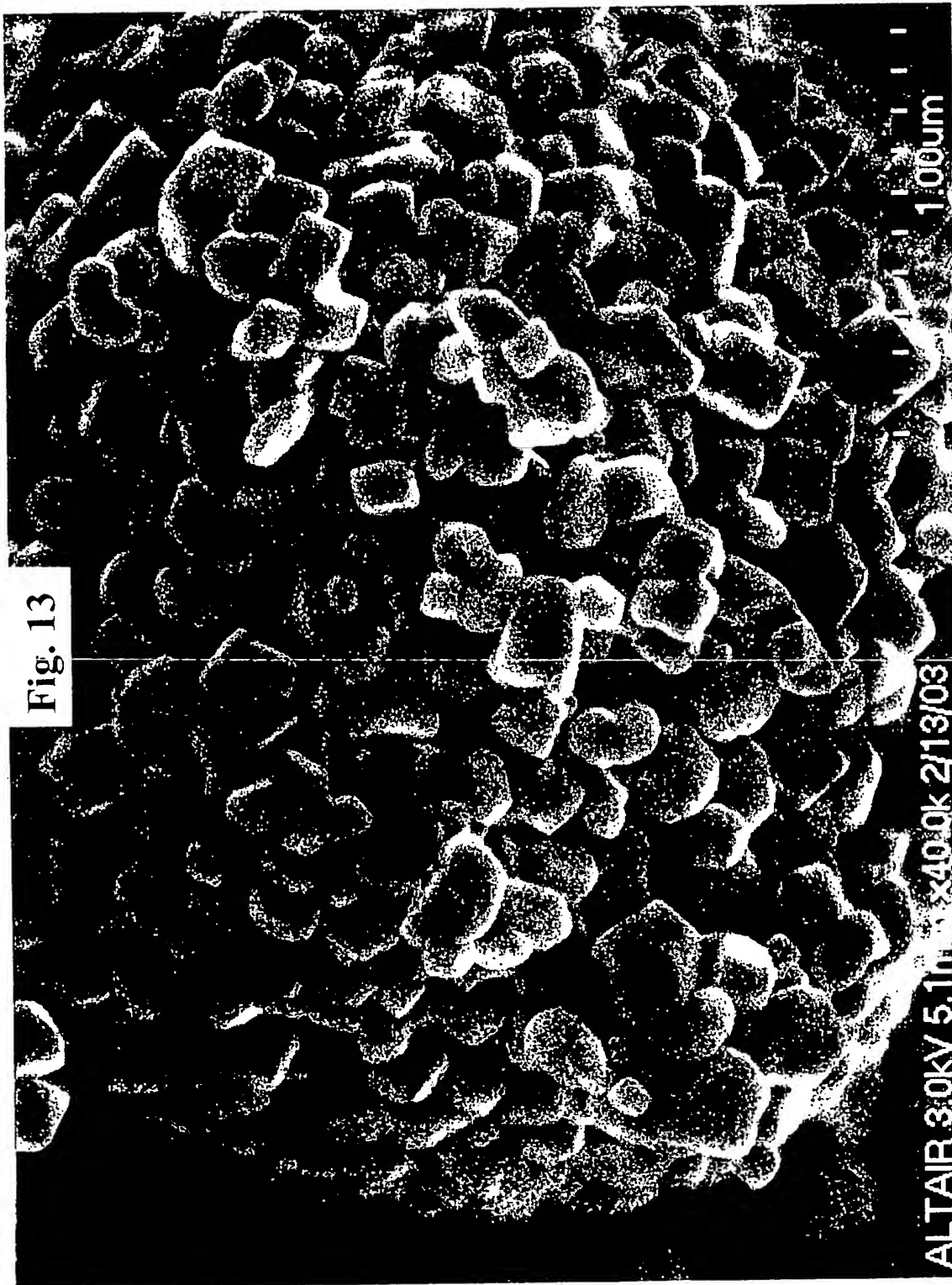
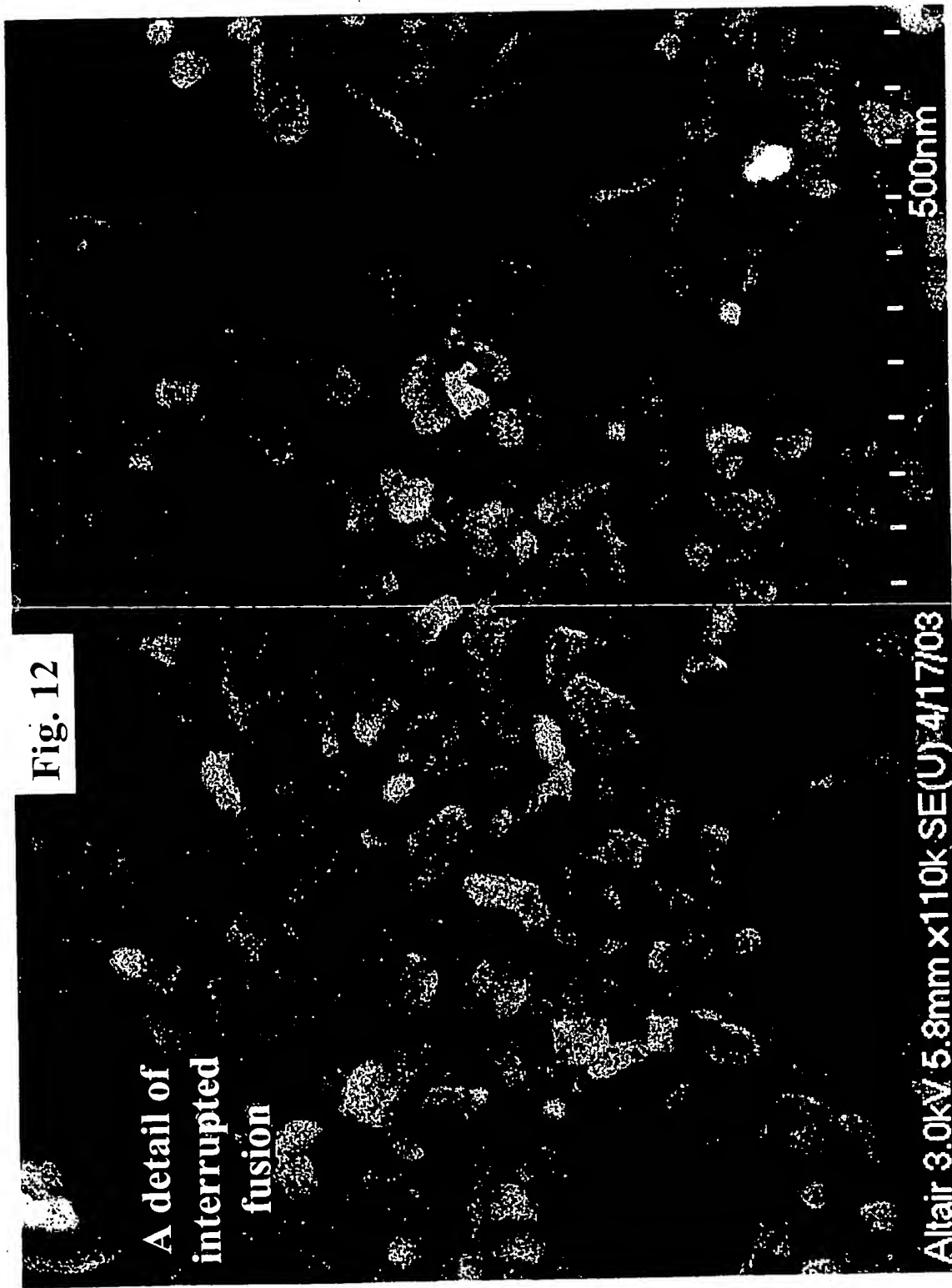


Fig. 13



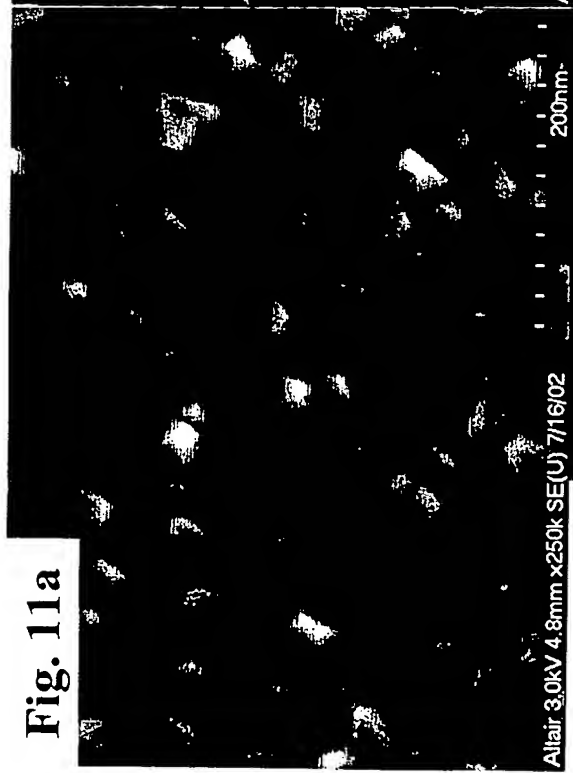
**Fig. 12**

**A detail of  
interrupted  
fusion**

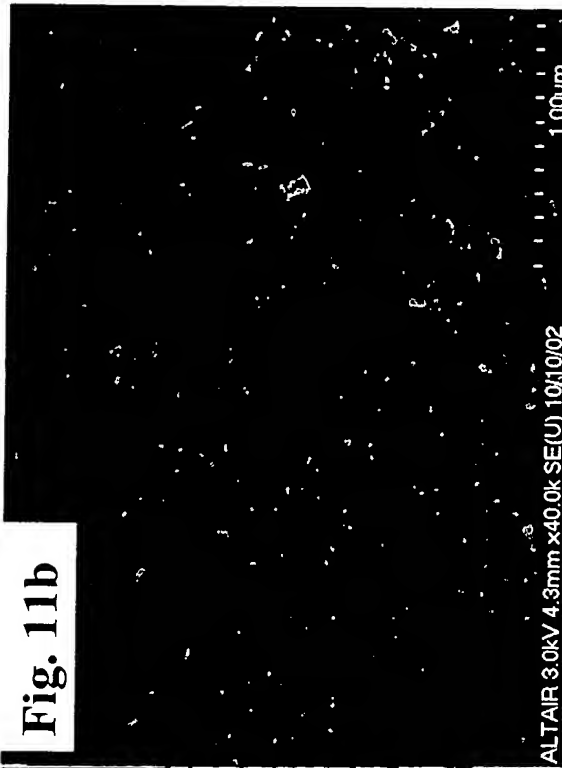


**Altair 3.0kV 5.8mm x110k SE(U) 4/17/03**

**Fig. 11a**



**Fig. 11b**



**Fig. 11c**

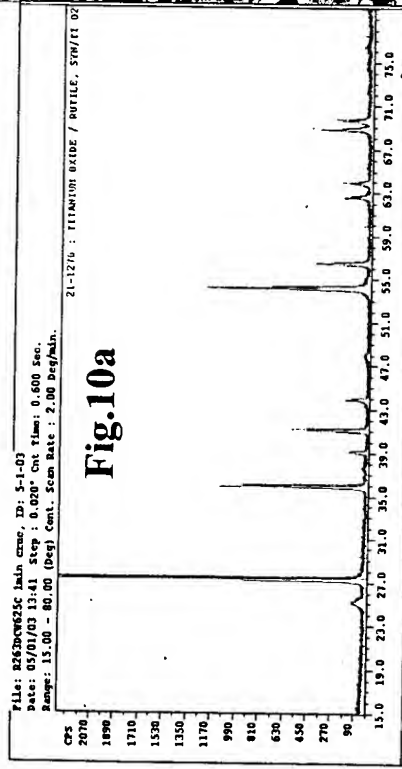


**Fig. 11d**



**Fig. 10**

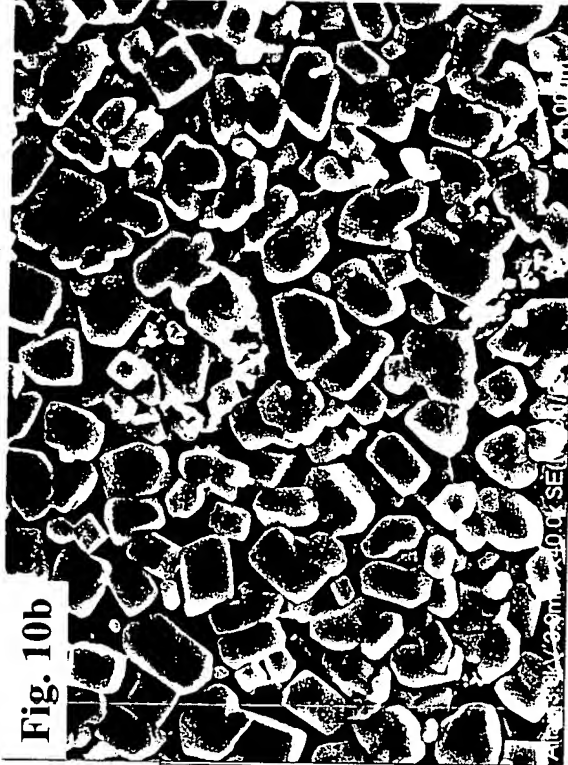
One minute calcination at 625°C



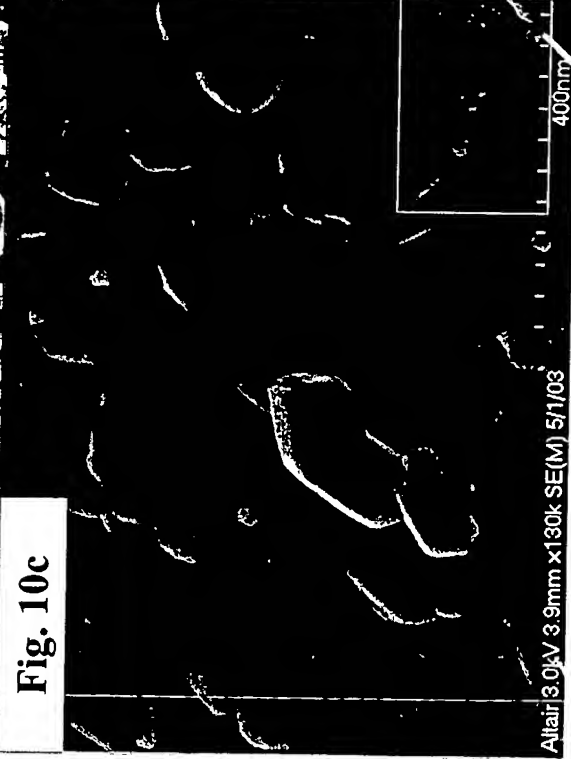
**Fig10a.** XRD pattern of 625°C/1 minute flash calcined material-only traces of anatase phase are present.

**Fig10b.** SEM image of the flash calcined product shows that rutile formed very fast to well developed crystals of the right particle size.

**Fig10c.** SEM image of flash calcined material-detail of rutile fused crystals and some traces of small anatase phase.

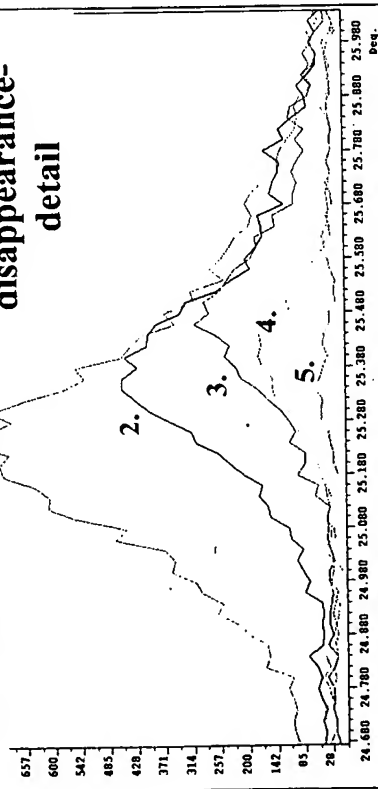


**Fig. 10c**



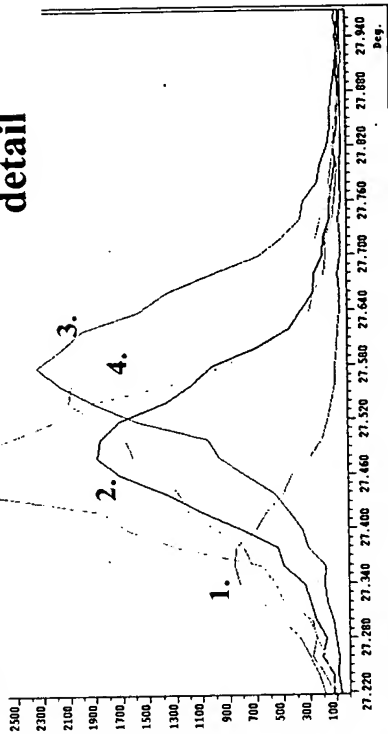
**Fig. 9a**

**1. Brookite/Anatase disappearance-detail**



**Fig. 9b**

**5. Rutile growth-detail**



**Fig. 9**

1. Calcination 650°C/1min
2. Calcination 650°C/2min
3. Calcination 650°C/3min
4. Calcination 650°C/7min
5. Calcination 650°C/90min

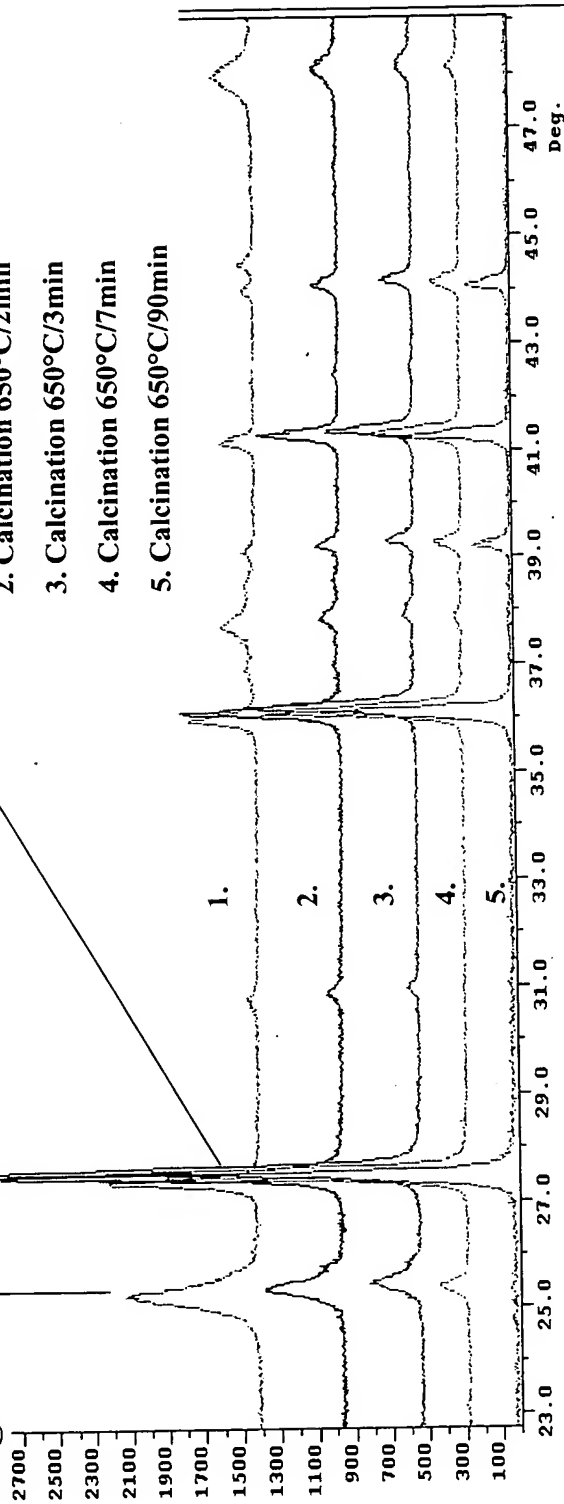
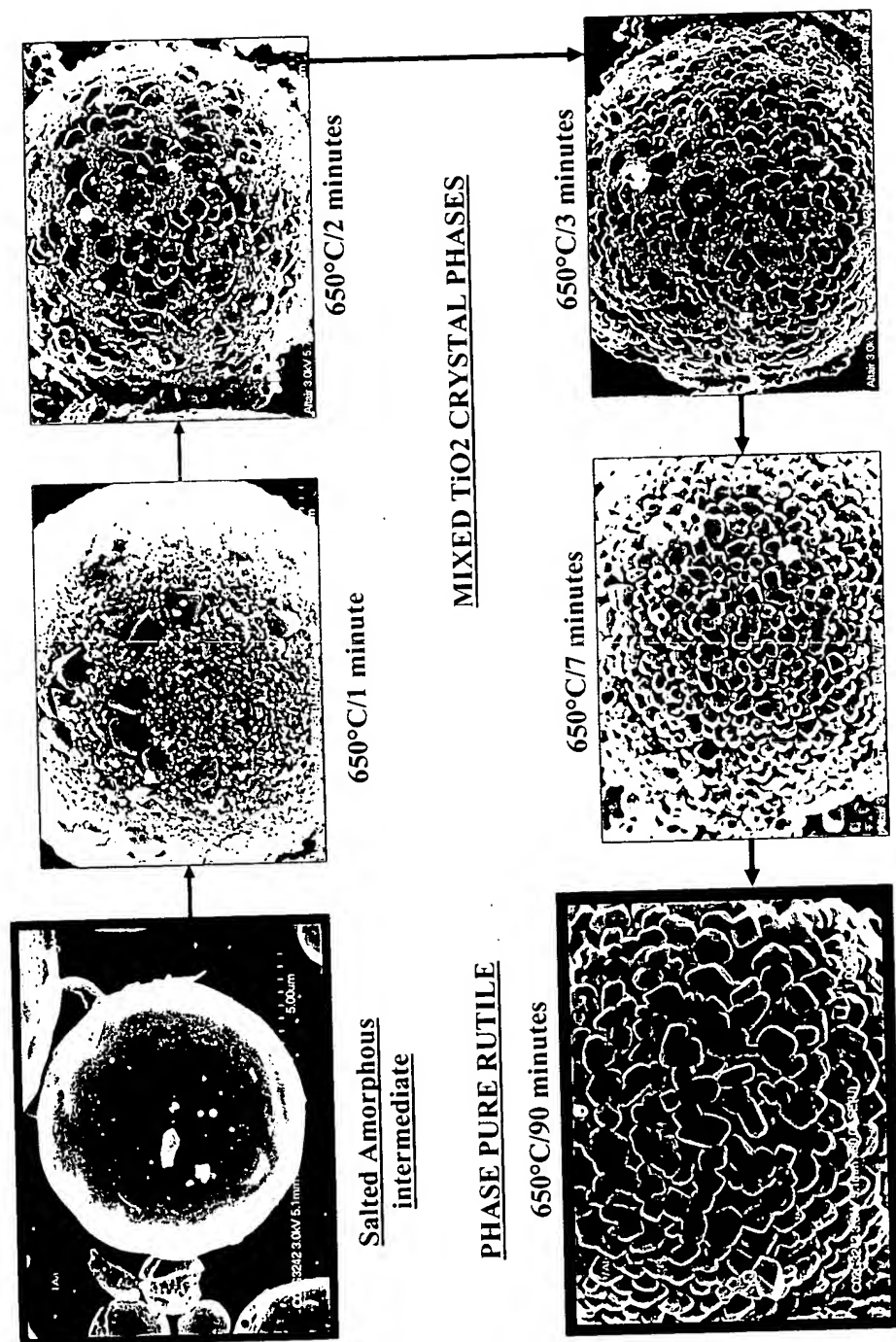
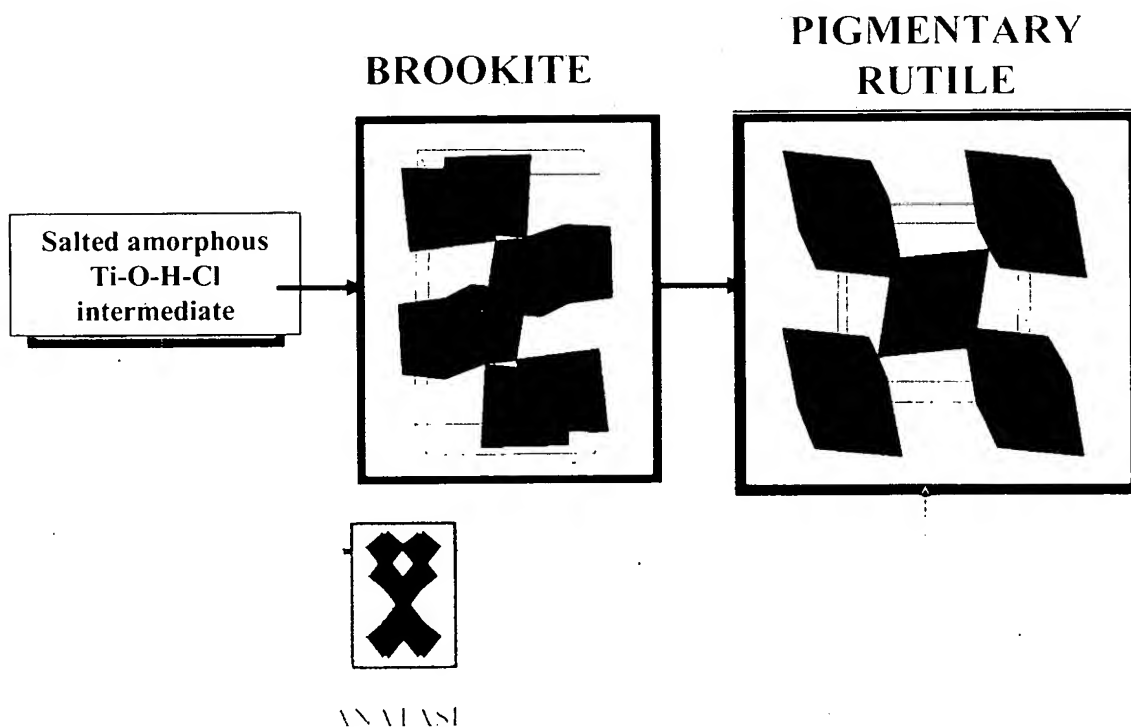


Fig 8.  
CALCINATION PROCESS AT 650°C.



**Fig 7.**

**AMORPHOUS INTERMEDIATE → RUTILE LOW  
TEMPERATURE CONVERSION PATHWAY.**



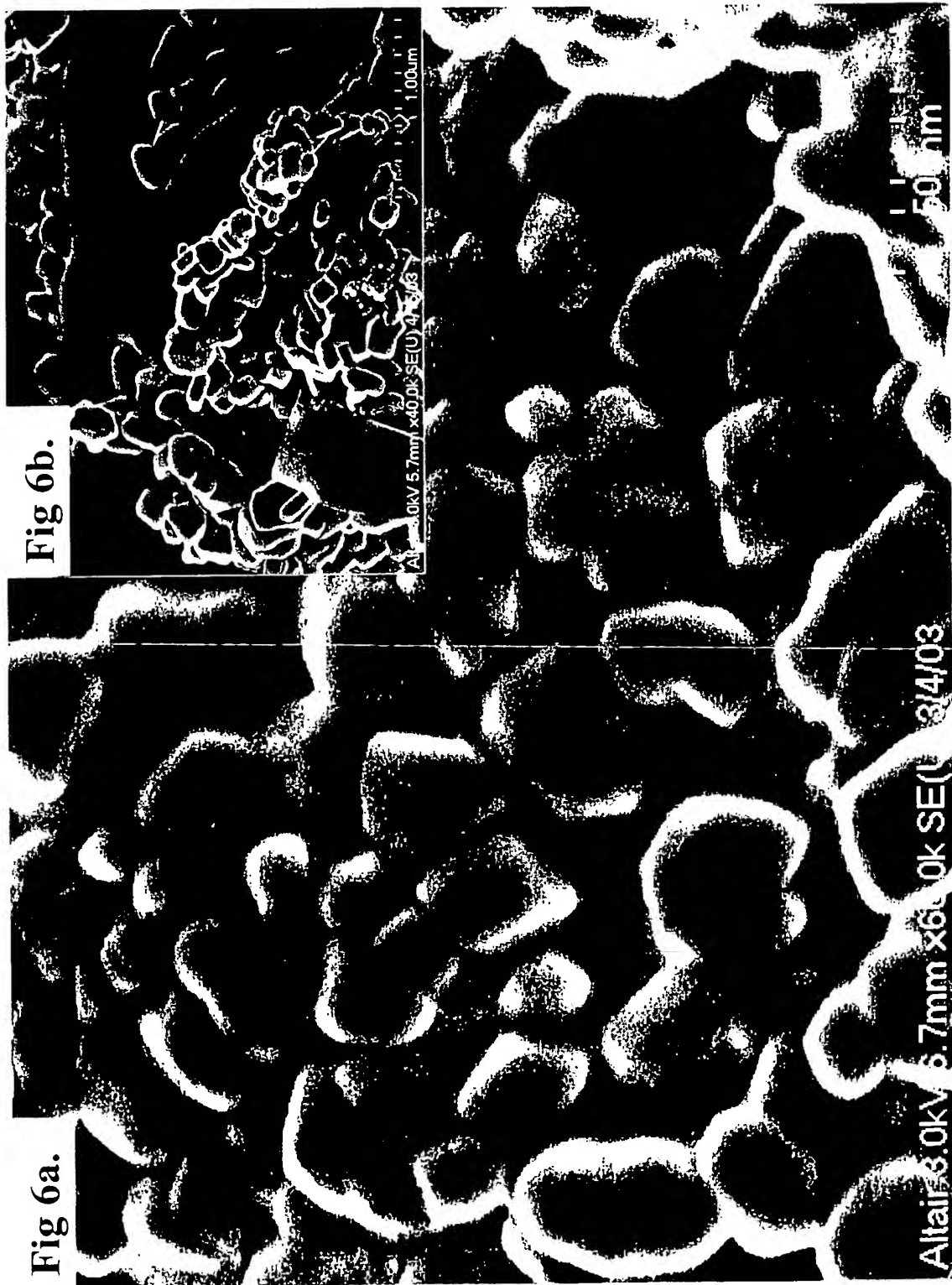


Fig 6a.

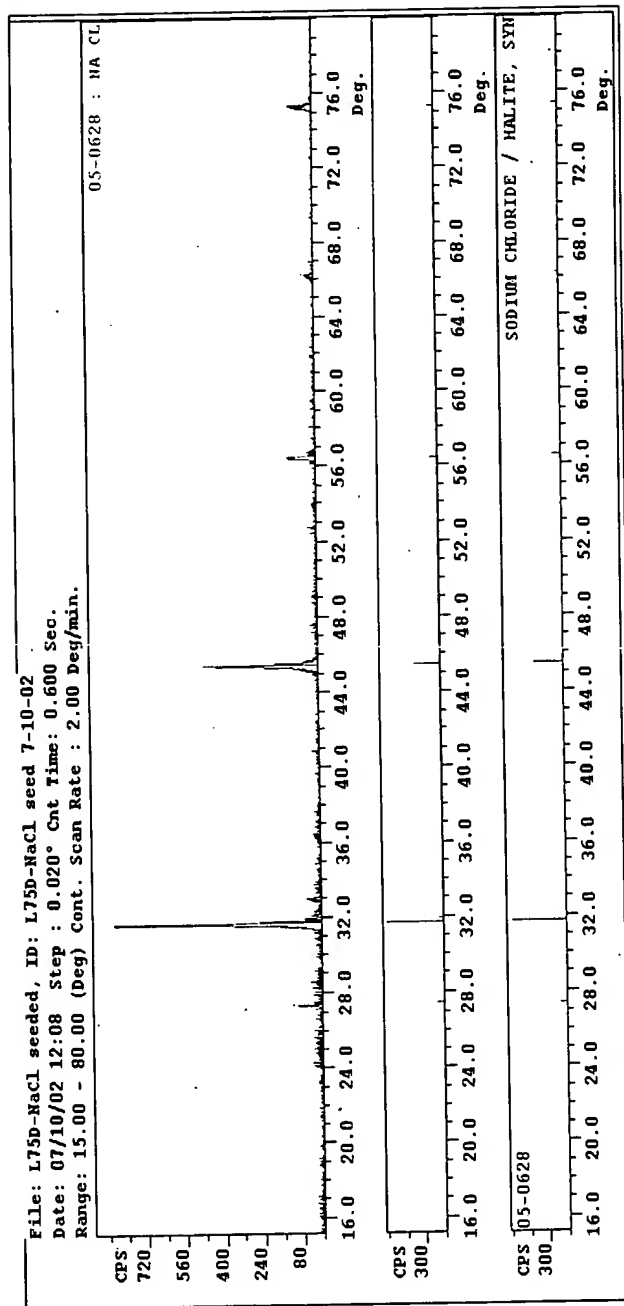
Fig 6b.

Altair 3.0kV 6.7mm x6000k SE(U) 3/4/03

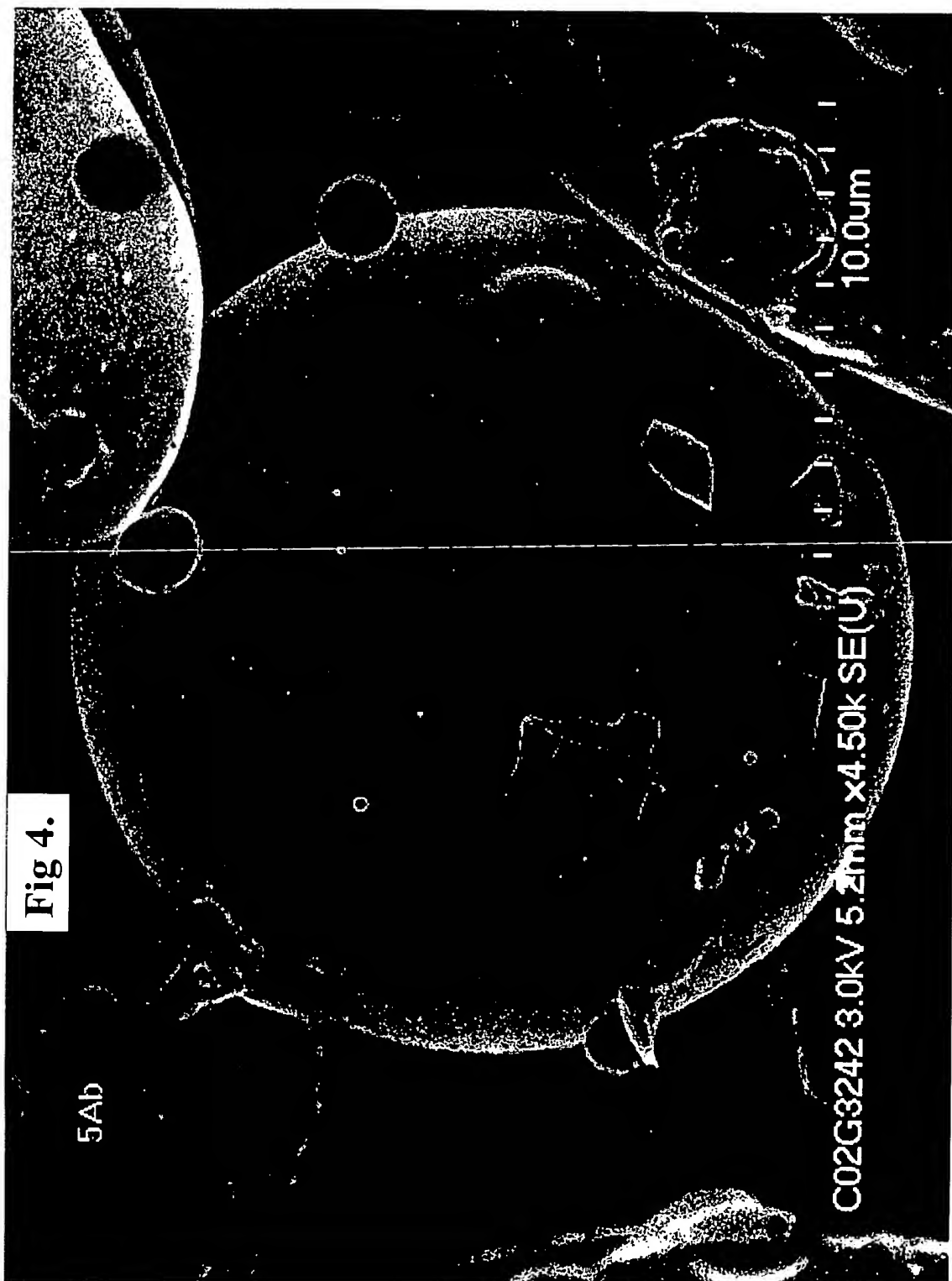
Altair 3.0kV 5.7mm x4000k SE(U) 4/3/03

**Fig 5.**  
**XRD scan of NaCl salted Ti-O-Cl-H amorphous**  
**intermediate.**

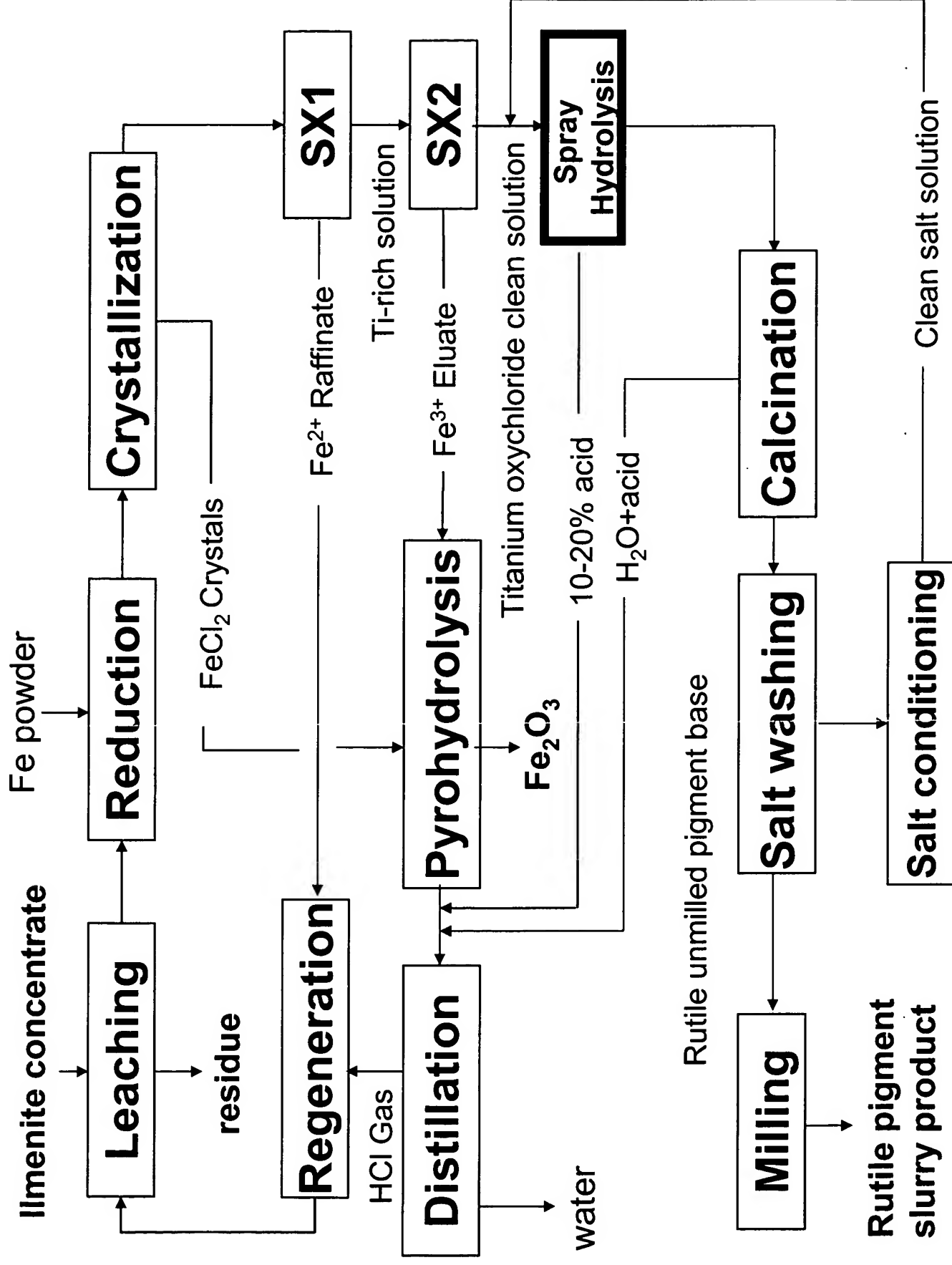
**No TiO<sub>2</sub> crystal forms were detected by the XRD.**





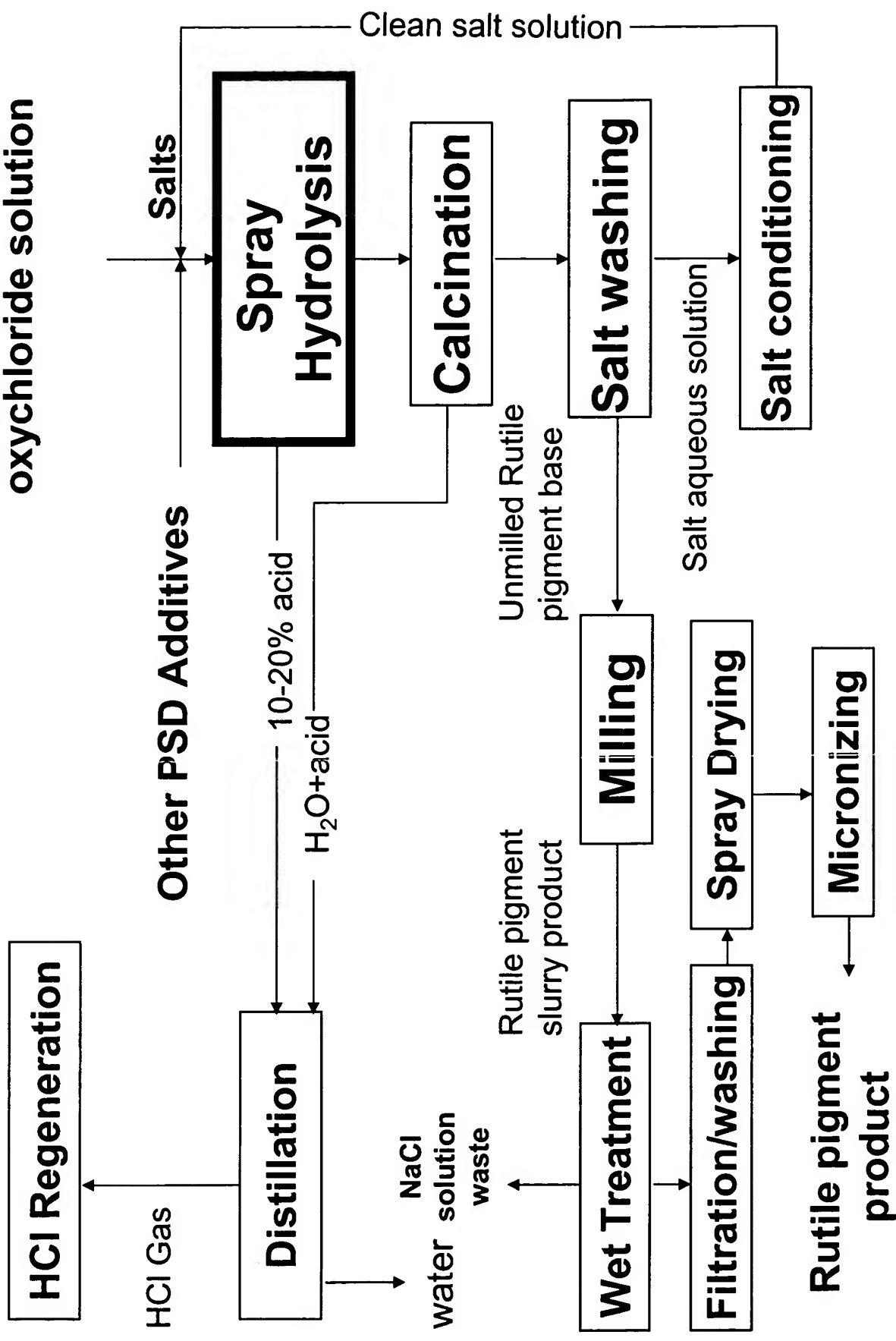


**Fig 1.**



**Fig 2.**

**Aqueous titanium chloride or  
oxychloride solution**



# KCl-LiCl-NaCl

